Science Toolkit: Grade 6 Objective 4.D.1.a

Student Handout: Science: Grade 6 Objective 4.D.1.a

Standard 4.0 Chemistry

Topic D. Physical and Chemical Changes

Indicator 1. Cite evidence to support the fact that some substances can be separated into the original substances from which they were made.

Objective a. Investigate and identify ways to describe and classify mixtures using the observable and measurable properties of their components.

Magnetism

Boiling Point

Solubility in water

Selected Response (SR) Item

Question

During an investigation, students were given chemical data for several common household products, as shown in the data table below. Students were to determine if a substance was an acid or base by using litmus paper. Litmus paper turns red in an acid and turns blue in a base.

Substance	Color of Solution	Melting Point (°C)	Boiling Point (°C)	Soluble in Water	Odor	Litmus Paper Test
Carpet cleaner	Clear	0	100	Yes	Weak	Blue
Vinegar	Clear	−2	118	Yes	Strong	Red
Oven cleaner	Clear	−1	93	Yes	Weak	Blue
Bleach	Clear, light yellow	0	100	Yes	Strong	Blue

Which physical property best classifies vinegar in a separate group of substances from oven cleaner?

A. boiling point
B. melting point
C. color of solution
D. solubility in water

Correct Answer

A. boiling point

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